**PATENT** **ATTORNEY DOCKET NO. UCSF.002.01US**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: **Vishwanath R. Lingappa**, *et al.* ) Examiner: Winkler, Ulrike
)
Serial No.: **10/040,206** ) Art Unit: 1648
)
Filed: **January 2, 2002** )
)
For: **HIV Capsid Assembly-Associated Compositions and Methods** ) **CLEAN VERSION OF CLAIMS**
)



Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The following is the text of the claims following entry of the amendments requested on the attached marked up version of the claims.

12. A method of producing monoclonal antibodies with conformational specificity for a host chaperone protein that is involved in assembly of immature HIV capsids and not to conformers of said host chaperone protein that do not bind to Gag and do not facilitate HIV capsid assembly, said method comprising the steps of:

B cont'd.

immunizing knockout mice with said host chaperone protein, wherein said knockout mice have a non-functional gene that no longer codes for said host chaperone protein and lack the ability to produce said host chaperone protein;

producing hybridoma cells from antibody producing cells of said mice;

screening said hybridoma cells for production of antibodies to said host chaperone protein; and

propagating hybridoma cells producing antibodies with conformational specificity for said host chaperone protein, whereby antibodies to said host chaperone protein are produced.

13. Monoclonal antibodies produced according to the method of Claim 12.

14. Binding fragments to said conformer derived from monoclonal antibodies produced according to the method of Claim 12.

51. The method according to Claim 12, wherein said host chaperone protein is HP68 and said conformer is an RNase L inhibitor.

52. The method according to Claim 12, wherein said host chaperone protein is obtained by separating a capsid intermediate complex into components comprising said host chaperone protein and an HIV capsid protein.

53. The method according to Claim 52, wherein said capsid intermediate complex is selected from the group consisting of proteins having a buoyant density of about 10S, about 80S, about 150S and about 500S.

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Respectfully submitted,

Date: April 4, 2003

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BRV/mnb
Enclosure

WHAT IS CLAIMED IS:

12. A method of producing monoclonal antibodies with conformational specificity for a host chaperone protein that is involved in assembly of immature HIV capsids and not to conformers of said host chaperone protein that do not bind to Gag and do not facilitate HIV capsid assembly, said method comprising the steps of:

immunizing knockout mice with said host chaperone protein, wherein said knockout mice have a non-functional gene that no longer codes for said host chaperone protein and lack the ability to produce said host chaperone protein;

producing hybridoma cells from antibody producing cells of said mice;

screening said hybridoma cells for production of antibodies to said host chaperone protein; and

propagating hybridoma cells producing antibodies with conformational specificity for said host chaperone protein, whereby antibodies to said host chaperone protein are produced.

13. Monoclonal antibodies produced according to the method of Claim 12.

14. Binding fragments to said conformer derived from monoclonal antibodies produced according to the method of Claim 12.

51. The method according to Claim 12, wherein said host chaperone protein is HP68 and said conformer is an RNase L inhibitor.

52. The method according to Claim 12, wherein said host chaperone protein is obtained by separating a capsid intermediate complex into components comprising said host chaperone protein and an HIV capsid protein.

53. The method according to Claim 52, wherein said capsid intermediate complex is selected from the group consisting of proteins having a buoyant density of about 10S, about 80S, about 150S and about 500S.